THE AGRICULTURIST

The Ayrshire Cow.

In an article on the value of the Ayrshire cow for general dairy purposes in the *Rural New Yorker*, Professor Henry Stewart argues that when all things are constdered, she is the best. The Ayrshire is a dairy cow pure and simple, but we are not prepared to say, with Professor Stewart, that she is the best dairy cow for general purposes. However, this is part of what he has to say on her behalf:—"Without disparaging any other race, or breed, I beg to be allowed to express my preference for the Asrshire cow as a farm or dairy cow for all pnrposes of such uses, and to give what I beleive to be the very reasons for ms preference. The fame of the Jerseys is built up upon the record of bnt a very few animals, and when we mention Alphea and two or three others, we come to a stop, and have to begin counting back to traces of these noted cows; and, when we have done, we may have counted 20 or 30, or, let us be liberal, and say 40 noted cows, and there are 14,460 left out of the 15,000 Jersey cows in America which one never hears of. But we may go among the Ayrshire herds and find everyone an excellent cow, whose record is noteworthy, but whose owner keeps her for her worth to him, and is not expecting to sell her by-and-by with all her progeny, and put money in his pocket that way. We find the Ayrshire a handsome, well-formed, brightly-coloured, compact, robust cow: stout-bodied, and promising goood beef when her natural end comes; hardy, and not requiring to be driven under shelter when a thuncer-storm or hail-storm threatens, or when the sleety tempests of November would drive a less robust animal indoors. Her broad, deep, long udder, capacious and wellformed, with her well-placed teats, and the copious milk vein, all evidences of a large yield of milk. Her deep abdomen, straight, broad back and rounded ribs show that her digestive organs are well developed, and her capacity for turning out food into milk and butter is based upon a natural proclivity thereto. In short, it may be said of the Ayrshire that, whilst she is the most popular cow for a dairy business, she has the merit of possessing the highest record in her native home, for the Scotch county of Ayrshire contains more than 50'000 pure-bred Ayrshire cows, while in other parts of Scotland she is exclusively the dairy cow, and at the same time is kept in large numbers in all all the principal dairy counties in England. This fact alone speaks volumes for the character and solid reputation of the Ayrshire, both in her own native locality and in other districts where popularity is gained only by solid merit. All I claim for the Ayrshire cow can be proved most conclusively by abundant evidence of the very best kind. I consider that my preference is wholly justified."

Animal Food for Young Chicks.

Ornithologists have remarked that all wild birds feed their young upon animal (insect) food, even if berries, buds, seeds, etc., form the natural diet of the parents or adults of the same species. Thus young chickens will not thrive so well without it as they will if supplied with animal food, in some shape. Earthworms are capital, for very young chicks. Cooked meat, chopped up fine, with boiled rice and potatoes, is a very nourishing and acceptable dish for them when young. But not too much of this—nor must it be given too often. Otherwise they scour from the excess of the meat feed. A little two or three times a day will help them, until they get to be six weeks old. By that time they will be strong enough to run in the fields and grass, where they wil gather a more natural supply of this kind of food, and, generally, plenty of it. Now we admonish the tyro, do not stuff very young chickens with animal food, just because we recommend it in general terms, for before the chick breaks from its narrow cell, the last of the yolk is taken into the stomach, which gives it the strength to make its own grand effort for freedom. This food will certainly last twelve if not twenty-four hours after it is free. During that time no other food is needed; only rest is required for the little stranger after its exhausting labor. When it leaves its mother in quest of food, it is quite soon enough to think of feeding it, and its first food should be as near the nature of the yolk as we can obtain. Hence, hard boiled eggs, mixed with oatmeal and moistened with milk, give a very nutritious and acceptable mixture for their first diet. This may be continued for three or four days, till it is changed to some cheaper and more practical food.—[American Poultry Yard.

Feeding for Beef.

The venerable John Johnson, near Geneva, N. Y., was a conspicuous instance of economical, systematic and successful feeding. Being a Scotchman and conversant with good farming in his native land, he placed a high value upon the manure made from fattening cattle to enable him to raise large crops and abundance of fodder. His principal crop was wheat but on a heavy soil he often raised from seventy-five to eighty bushels of corn per acre, and made his fodder of corn stalks and straw; but at times he states, he used forty-five tons of oilcake in a year. When he put up a lot of three-year-old steers to feed he began with two pounds of oilcake, and then to five pounds of corn meal, and this was increased gradually to four pound of cake and eight to ten pounds or corn meal. He also avoided the too common practice of feeding a single feed, however good it may be in iself. He gives hay once a day, and sometime bran and pea meal as a change. This system he has followed for more than forty years and has found that by it he could put upon a grade short horn steer three pounds of flesh per day for a period of 150 days.

Physical Characteristics of the People of the Kingsmill Group and a Peep at Their Every Day Life.

(To be continued.)

Many of the residents on these Islands are, or think they ought to be familiar with the physical appearance of the natives of the Kingsmill, or Gilbert Island group, inasmuch as many of those people have been brought here in labor vessels to remain for a term of years.

But the native of those low-lying coral islands on the voyage hither is necessarily carried into a, to him—high latitude and low temperature where his facilities of mind and body are benumbed to that degree that he is not the same person when he lands at Honolulu that he was when he left his home.

"Nothing of him that doth fade, but doth suffer a sea change." And not a change for the better either.

At the island Mariki, which as Prof. Dana says, "lies like a garland thrown upon the water;" the men who come off to the vessel in their neatly built canoes, excite admiration on account of their healthful appearance and the grace and ease of their movements. Their skin, which is entirely free from any artificial covering save that afforded by a mat fastened around the waist, is of a rich warm chestnut brown color, smooth to the eye and touch and glossy with the cocoa nut oil which they freely use. Their limbs are finely proportioned and, as a rule, the muscular system well developed. Their features are particularly pleasing; the head being fairly well shaped and covered with an abundance of glossy black hair, is allowed to grow rather long; the eyes are large, brilliant and yet soft in their expression like the Hawaiians. The nose is inclined to be aquiline with the nostrils fully developed but not spreading, as in the Papuan race. The lips are full but not coarse, and when they laugh—which they do very easily,—they show a glittering range of, strong perfect teeth that excite ones envy, admiration and compassion all at once. Envy, that one does not possess such immaculate grinders; admiration on account of their beauty, and compassion for the possible dentist who may chance to drift down that way to earn a living by his profession amongst such a tooth-ful people.

Going ashore one is quickly surrounded at a little distance by a circle of the younger people of both sexes, whose curiosity is great enough to bring them within a few paces of the white stranger, while their fear of him keeps them ever on the alert to fly at the slighest advance on his part. The girls, save that their shoulders are too square, are wonderfully pretty, and not the least amongst their many graces is that of modesty. Of clothing they have none save a belt passed around the hips with a heavy fringe falling almost to the knees (the very young not being embarrassed with even this light covering) but it suffices.

With true feminine instinct they braid a pretty white fragrant blossom in their dark hair (nature has kindly provided that at least one such flower should find the sandy soil of those islands favorable to its growth) and relentless "fashion" causes them to tattoo themselves here and there, and fill the pierced lobes of their ears with perhaps a rolled up leaf, or bit of shell or, grandest of all, a "trade" jewel, ring, or what not.

Here and there may be seen a mere girl carrying astride one hip a baby. The mother may not seem to be much older that many of her yet unmarried friends,—and possibly she is not, though they are barely in their "teens"—but a mother she is and in a year or two an "old woman" she will be, like many others seen upon the beach, with scarcely a trace of youthful beauty or grace left her. Betrothed, as many of the boys and girls are in infancy, their parents look forward with impatience to the earliest possible moment when they can be made man and wife, and this hurrying of the woman on to maternal and household cares brings about a fearfully rapid decline into the "sear and yellow" old womanhood that marks most married females in the group.

The offspring that are permitted to live have a royal time of it in infancy. They are generally fat, roly-poly little men and women, happy in the sun on the dry warm sand, happier when being crammed with the creamy pulp of a young cocoanut, and happiest of all in that they are under no more restraint from clothing, care or cold than the sleek lizards that slip in and out amongst the coral rocks.

The old women are full of care. On them devolves the duty of preparing the food, no slight job when the fruit of the pandanus is to be pounded and otherwise reduced to a so-called edible state. They make the mats that are so extensively used, and if by chance a huge shark has been brought ashore by the men, it is the old women who carefully wrap the monster in pandanus leaves like a mummy, arrange an *imu*, or oven for baking it, see that is properly cooked and bring it home in a wide mat, the procession strongly suggestive of a funeral, to the house where the men are awaiting its arrival.

Of course the children are also the care of these same women, and though a father is now and then seen fondling a sprawling young one, yet it is on the back of the granny that the little imps cling when taken from place to place, and it is under the mother's mat that they crawl when night brings with it sleep.

Jealousy amongst the women seems to be more common than between the men, and very fierce are the quarrels from this cause which spring up between members of the gentler sex. They often come to blows and if some of the "old men," who are generally loafing around, do not interfere with a thick midrib of a cocoanut branch, the fair ones sometimes cut each other severely with a nice handy piece of wood armed with one or two shark's teeth that they carry for such occasisns concealed in the fringe of their waist belts.

There is a certain method in their madness however, the wounds they inflict being generally confined to the back and arms, and though the gashes look formidable, yet being kept bathed in fresh cocoanut oil they very quickly heal with no worse results than an ugly scar.

There is a great similarity, the one with the other, between the people inhabiting the different islands, though in-as-much as at Mariki, Butaritari, and Apiang, in the north part of the group, there is very much more rain each year than on the islands more directly under the equator, the vegetation is more luxuriant and the cocoanuts larger and more abundant than they are further South, the people on the islands named are in rather better condition physically than their neighbors near the line.

The people lead a literally "open air" life. Their houses are not enclosed on the sides, being a simple roof of close fine thatch raised on posts of the lauhala about four feet from the ground. Under this shelter are spread mats, and though, in some instances, a sort of second story is made by running a floor across overhead under the roof, yet for the most part their days and nights are passed on the ground, with a mat for a covering when they sleep, and the cool air circulating freely on all sides.

Mosquitoes abound, and to get away from them little "sleeping houses" are built on stakes driven into the reef rock, and where the rising tide surrounds them, and the mosquitoes do not come; or if they do, these houses are so tightly shut up on all sides that they cannot get in, or, getting in, they are smothered by dense clouds of tobacco smoked by old and young alike.

This practice of stowing themselves away in a closely shut up hut is not so unhealthful after all. The basket-work sides of the hut admit a fair quantity of fresh air, and the hours passed in these inclosures are but few.

In civilized communities night is supposed to be the time for sleep, the day for action. In the equatorial coral-built world, where every day is full of sunshine and every night is balmy, cool and light, the people regulate their simple lives by the slowly changing rise and fall of the tides. It is not a question with them of daylight or dark, but simply a matter of convenience as to whether they shall fish or bathe, or sleep or swim. The sea comes and goes, at one time sapping with its rising tide the base of the cocoanut trees whose far-reaching roots give stability to the shifting sands, and again ebbing away until the smooth, creamy white surface of the shore reef to the lagoon on the one hand, and the rough, brown, [illegible] like floor of the barrier [illegible] are both laid bare, and the reef outside, crustacea, sea-anemonæ, and countless shells holothenia afford a rich harvest to the fishermen and women.

The cocoa nut tree and the sea being the two sources from which the Gilbert Islanders derive their main staples of food, it will naturally be inferred that those who live upon their products attain to great skill in the utilization of their products.

In the catching of fish especially they excel. Besides the ordinary appliances, such as the sein and scoop net, they construct ingenious basket-traps into which the fish are decoyed by bait carefully prepared and knowingly adapted to the tastes of the particular kind of fish sought for. For the capture of the flying fish they arrange around the circumference of an empty cocoa-nut a number of short thin lines, from six inches to a foot in length on to which are tied hooks made for this special purpose of slender, sharp, bones of fish, each loaded with a morsel of "bait." These shell floats the fisherman will take with him in his canoe at favorable times, and set them in the water a few yards apart. He knows the school of flying fish are there, and generally he is kept busy for a while paddling from one float to another as soon as he sees them begin to spin around from the struggles of the hooked fish.

It seldom happens that he does not secure a large number of these most delicate fleshed fish in this manner in a short time. One of the most picturesque of their modes of fishing is that of night fishing by torch light. A long *flambeaux* of dry cocoa nut leaves is prepared by binding them together in a compact roll about six feet in length and six or eight inches in diameter. This is lighted and held aloft in the left hand of the fisherman, while with his right he wields a small scoop net fixed on a handle about two feet long. Hanging an open basket around his neck the fisherman wades out into the light surf that, when the tide is high, breaks on the smooth beach, and when in the water up to his arm-pits the bright glare of the torch on the glittering sea attracts hundreds of the "gar" or "bill" fish to the surface, and as they glance swiftly by, the fisherman, with dexterous dash of his net captures them. These fish have remarkably long slender bodies, large prominent black eyes, and slender sharp horny jaws, that when shut are like a delicate but keenly pointed stiletto. They move very swiftly, with a habit of leaping into the air, and by a succession of short bounds as it were, from the surface of the water continue their flight with great rapidity to a considerable distance. This movement is entirely different from the flight of the flying fish, as the gar-fish has no broad pinion like side fins that help to support them while out of the water, but they depend wholly upon the impetus obtained before leaving the water, which impetus is renewed each time they strike the water in the series of bounds they take. Of necessity their flight is in a straight line, and this inability to alter their course sometimes causes them to "fetch up" against the sides of canoes into which their sharp pointed "bills" are frequently driven. Hence their capture is not unattended with some danger, one instance coming under the writer's observation when the poinard-like bill was driven into the side of a woman fishing, killing her immediately. As has been said, the scene presented of a calm evening, of some hundreds of dark forms almost buried in the snowy crests of the breaking surf, and bearing aloft a torch bright with flame and showering sparks upon the water, their figures moving here and there busily dashing with their nets at the silvery bright, glittering fish as they leap from out the sparkling circle of light is very picturesque and pleasing.

In fishing with hook and line many of the fishermen (the older ones especially prefer) hooks of their own manufacture, though the most improved forms of "Limericks" are to be had. The rather clumsy but very effective hooks made from flat pearl shells are said by them to be the only ones that will attract the attention of certain fish. Others made from a wrought nail bent into two-thirds of a circle and keenly pointed, are very [illegible] from Section [illegible] much used, while for sharks wooden hooks, made from the naturally crooked branches of a low growing shrub, are altogether the best, in their opinion. These last range in size from 6 inches in length to 18 inches, and the line attached to them is, in many cases, made up of a number of strands bound together loosely so that the shark finds it impossible to bite them in two as he could a firmly twisted rope.

A rather amusing method of capturing the shark is that of feeding him from a canoe, out where the water is two or three fathoms deep, until he is gorged and sinks to the bottom for a quiet nap. Then the fisherman slips overboard with a stout line on which is a running noose, and sinking down to the sleeping shark, gets this noose over his tail. This done the line is led into shallower water, a mob of people get hold of it and start for the shore dragging their helpless prey after them. Being hauled backward by his most powerful propeller the shark can do nothing but writhe convulsively, foam at the mouth with rage, as it were, and give up the ghost when once on the dry sand.

Many fine turtles are caught in the lagoons, and large fish-ponds are made by laying low walls of coral rock on the flat floors of the barrier, and lagoon reefs.

The people own large numbers of fowls which grow to a very large size and are fat and good. But the natives as a rule will not eat them! They say the fowls are unclean; that they eat everything the can find, offal and other stuff—which is true enough, and so they keep them, or allow them to multiply for the benefit of traders and others who trade at their shores. They can be bought at from five cents to fifteen cents each, and it is worth while to get say fifty or sixty of them at a time on the vessel both for food and (as 98 per cent of them will prove to be roosters) for the fun they will afford in their struggles to adjust the "balance of power."

On most of the Islands there are a great many dogs. Often it happens that their numbers increase so (one man owned 34) that they are ordered to be killed wholesale. In one district, possibly a square mile in extent, 197 were shot by one man in two days. The owners did not suffer a "dead loss" from this wholesale destruction, for the material was then provided for a grand feast for all the people in that neighborhood.

It has been decided in a California court that a man can sleep in a tree, and yet not be a lunatic. He is only branching out a little.